APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/483,561	01/14/2000	Melvin M. Takata	CITI0144	8542

27510	7590	10/10/2003

KILPATRICK STOCKTON LLP
607 14TH STREET, N.W.
SUITE 900
WASHINGTON, DC 20005

EXAMINER
AHMED, SAMIR ANWAR

ART UNIT	PAPER NUMBER
2623	

DATE MAILED: 10/10/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/483,561	TAKATA ET AL.
	Examiner	Art Unit
	Samir A. Ahmed	2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 July 2003</u> .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12,14,15 and 27-41* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12,14,15 and 27-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on <u>28 July 2003</u> is: a)☒ approved b)☐ disapproved by the Examiner.

     If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____ .

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

     a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

1.   The amendment filed 7/28/03 have been entered and made of record.

2.   In response to applicant's amendment filed 7/28/03 the objection to the drawings

under 37 CFR 1.84(p)(5) is withdrawn.

3.   Claims 27-41 is denied priority to provisional Application 60/116,115 filed

01/15/99, because provisional Application 60/116,115 never disclosed anywhere

"classifiable reference characteristic" nor disclosed, "classifying the characteristics of

the individual". This subject matter is only disclosed in the instant Application and has

the filing date 01/14/2000 as it's priority.

4.   Applicant has amended independent claim 1 to add the features of claim 13.

Applicant's arguments filed 7/28/03 have been fully considered but they are moot in

view of new grounds of rejection.

        Applicant alleges that the "classifiable reference characteristic" [,]" (page 9, lines

10-14). The Examiner disagrees. Firstly, the Examiner has reviewed the specification of

provisional Application 60/116,115 filed 01/15/99 and cannot fined anywhere a

disclosure of "classifiable reference characteristic" nor "classifying the characteristics of

the individual". As a matter of fact the subject matter of "classifying the presented image

metric based on the at lest one characteristic of the presented iris" disclosed in the

instant application, 09/483,561 starting on page 13, line 18 and ending on page 14, line

24 is not disclosed in provisional Application 60/116,115 filed 01/15/99 and cannot have

priority to that provisional. The written description in the provisional is inadequate. The

U.S. Court of Appeals for the Federal Circuit in Washington, D.C., concluded last year,

that the provisional must cover all the claims made in the final utility patent application,

when it handed down its decision in *New Railhead MFG, LLC v. Vermeer Mfg. Co.* New railhead patented a drill bit for horizontal drilling in rock, because its utility application for the drill bit claimed a small structural feature that had not been fully described in the provisional. The provisional was thrown out; along with its all-important filing date. Secondly, the Examiner is requesting that the applicant show where the subject matter disclosed in the instant application, 09/483,561 starting on page 13, line 18 and ending on page 14, line 24, is disclosed in provisional Application 60/116,115 filed 01/15/99?

Applicant alleges that the " Morimoto et al. with filing date of 9/07/99 is not a valid reference [,]" (page 10, lines 7-9). The Examiner disagrees. Morimoto et al. with filing date of 9/07/99 is a valid reference because provisional Application 60/116,115 never disclosed anywhere "classifiable reference characteristic" nor disclosed, "classifying the characteristics of the individual" and does not provide adequate enablement. This subject matter is only disclosed in the instant Application and has the filing date 01/14/2000 as it's priority.

Applicant alleges that the "PTO indicates that it would have been obvious to use" [,]" (page 10, lines 15-page 11, line 3). The Examiner disagrees. Schwab, describes in some embodiments to retrieve selected images for comparison, from the server database in order to optimize the search function (col. 7, lines 39-50), but also discloses, alternatively, all data files and images are held in the active memory or off-loaded to the local hard-drive of the client PC so they may be reviewed and compared (col. 6, lines 18-21) and in any case, Daugman's teachings of concurrent or parallel matching (comparison) of a test image with a plurality of reference images (selected

images or all images) would increase the system search and response speed over

conventional comparison where the test image is compared to each reference image.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351 (a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Rejection under 35 U.S.C. 102(e), Patent Application Publication or Patent to

Another with earlier filling date, in view of the American Inventors Protection Act of 1999

(AIPA) and the Intellectual Property and High Technology Technical Amendments Act of

2002.

6.   Claims 27-30, 32-34, 36, 40-41 are rejected under 35 U.S.C. 102(e) as being

anticipated by Morimoto et al. (U.S. Patent 6,418,235). The grounds for rejections

stated in paragraph 6 of the Office Action mailed on 1/28/03 paper number 9, are

incorporated by reference herein.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 31,35, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto et al. (U.S. Patent 6,418,235) as applied to claims 27 and 28 above, and further in view of Mann et al. (U.S. Patent 6,119,096). The grounds for rejections stated in paragraph 9 of the Office Action mailed on 1/28/03 paper number 9, are incorporated by reference herein.

9.   Claims 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto et al. (U.S. Patent 6,418,235) as applied to claim 27 above, and further in view of Daugman (U.S. Patent 5,291560). The grounds for rejections stated in paragraph 11 of the Office Action mailed on 1/28/03 paper number 9, are incorporated by reference herein.

10.   Claims 1-8, 10-12, 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwab (U.S. Patent 5,973,731), and further in view of Daugman (U.S. Patent 5,291560).

        As to claim 1, Schwab discloses a method for identifying a presented individual, comprising:

        determining a match between a presented image metric, representing at least one characteristic of a presented image of the presented individual, and a reference metric selected from a predetermined arrangement of a plurality of reference metrics [physical appearance in an image obtained from an individual during identification is compared (matched) with physical appearances stored in a database (reference

metrics), characteristics of physical appearance are eye scan color of the eyes, hair

color weight (col. 2, lines 1-12, col. 9, line 47-col. 10, line 3, col. 10, lines 13-19],

wherein each one of the plurality of reference metrics represents at least one reference

characteristic of one of a plurality of known individuals (col. 10, lines 13-19); and

identifying the presented individual as one of the plurality of known individuals if a

match is found between the presented image metric and one of the plurality of reference

metrics (col. 4, lines 4-12, col. 10, lines 28-31). Schwab does not disclose, further

comprising concurrently determining a match between a plurality of presented image

metrics and the plurality of reference metrics, wherein each of the plurality of presented

image metrics represents at least one characteristic of a presented image of one of a

plurality of presented individuals, and wherein the predetermined arrangement

comprises a circular presentation of the plurality of reference metrics, and identifying

each of the plurality of presented individuals as one of the plurality of known individuals

if a match is found between one of the plurality of presented image metrics and one of

the plurality of reference metrics.

Daugman discloses an iris recognition system to form a unique iris code

(Abstract). The universal format of iris codes is used for rapid parallel (concurrent)

search across large database of stored reference iris codes to determine identity of the

individual (col. 3, lines 14-20, col. 18, lines 1-9). The comparison is implemented by

lateral scrolling of the iris codes relative to each other; the codes were wrapped around

into a cylinder and then rotating the cylinder and repeating the comparison process

(circular presentation of the plurality of reference metrics) (col. 12, lines 54-63). The

subject is identified if a match is found (Fig. 1, steps 26, 28). It would have been obvious to one with ordinary skill in the art at the time the invention was made to use Daugman's teachings to modify Schwab's system by concurrently determining a match between a plurality of presented image metrics and the plurality of reference metrics, wherein each of the plurality of presented image metrics represents at least one characteristic of a presented image of one of a plurality of presented individuals, and wherein the predetermined arrangement comprises a circular presentation of the plurality of reference metrics, and identifying each of the plurality of presented individuals as one of the plurality of known individuals if a match is found between one of the plurality of presented image metrics and one of the plurality of reference metrics in order to in order to increase system search and response speed.

As to claim 2, Schwab further discloses, further comprising arranging the predetermined arrangement based on the at least one characteristic of the presented image metric [the images are stored in a local database (predetermined arrangement) based on a decision of the manager of the image (user) that it is useful for local identification (user defined characteristic) (col. 2, lines 52-59, col. 4, lines 39-47)].

As to claim 3, Schwab further discloses, wherein the at least one characteristic of the presented image metric comprises a physical characteristic of the presented individual (col. 2, lines 7-12, col. 9, lines 47-50).

As to claim 4, Schwab further discloses, wherein the physical characteristic is selected from the group consisting of hair color, skin tone, and facial characteristic of the presented individual (col. 2, lines 7-12, col. 9, lines 47-50).

As to claim 5, Daugman further discloses, wherein the at least one characteristic of the presented image metric comprises a characteristic of a presented iris of the presented individual [an iris recognition system to form a unique iris code (Abstract)].

As to claim 6, Schwab further discloses, further comprising arranging the predetermined arrangement based on a user-defined characteristic of each of the plurality of reference metrics [the images are stored in a local database (predetermined arrangement) based on a decision of the manager of the image (user) that it is useful for local identification (user defined characteristic) (col. 2, lines 52-59, col. 4, lines 39-47)].

As to claim 7, Schwab further discloses, wherein the user-defined characteristic comprises a non-image-related characteristic of each of the plurality of known individuals [the storage of images in a local database is based on regular customers at a particular retail store (non-image related characteristic) (col. 2, lines 52-59, col. 4, lines 39-47)].

As to claim 8, Schwab further discloses, wherein the non-image related characteristic is selected from a group consisting of geography, memberships, affiliations and individual habits [the storage of images in a local database is based on regular customers at a particular retail store (non-image related characteristic is based on memberships or affiliations with a particular retail store) (col. 2, lines 52-59, col. 4, lines 39-47)].

As to claim 10, Schwab further discloses, wherein the predetermined arrangement is based on a combination of the at least one characteristic of the presented image metric and a non-image-related characteristic of each of the plurality of known individuals [physical appearances stored in a database (reference metrics), characteristics of physical appearance are eye scan color of the eyes, hair color weight (col. 2, lines 7-12, col. 9, line 47-50), the decision to store the images in a local database and not a centralized database is based on non-image-related characteristic such as affiliation with a specific retail store (col. 2, lines 52-59, col. 4, lines 39-47), i.e. a combination of physical appearance and non-image-related characteristic].

As to claim 11, Schwab further discloses, further comprising arranging the predetermined arrangement based on a combination of, one of a physical characteristic of the presented individual and a non-image-related characteristic of each of the plurality of known individuals [physical appearances stored in a database (reference metrics), characteristics of physical appearance are eye scan color of the eyes, hair color weight (col. 2, lines 7-12, col. 9, line 47-50), the decision to store the images in a local database and not a centralized database is based on non-image-related characteristic such as affiliation with a specific retail store (col. 2, lines 52-59, col. 4, lines 39-47), i.e. a combination of physical appearance and non-image-related characteristic], and Daugman further discloses, using a characteristic of a presented iris of the presented individual [an iris recognition system to form a unique iris code (Abstract)].

As to claim 12, Daugman further discloses, further comprising arranging the predetermined arrangement by binning the plurality of reference metrics based on the at least one reference characteristic of the plurality of known individuals such that reference metrics having similar reference characteristics are arranged in the same bin [an iris recognition system to form a unique iris code (Abstract). A histogram is applied to 1,228 pairs of different pictures (plurality of reference metrics) of the same iris obtained at different times as shown in Fig. 28 in order to group the similar iris codes together (binning) (col. 15, lines 40-58)].

As to claim 14, Daugman further discloses, wherein the presented image metric and each of the plurality of reference metrics are in a digital format that provides a substantially repeatable representation of the at least one characteristic of a presented image of the presented individual and the at least one reference characteristic of one of a plurality of known individuals, respectively [an iris recognition system to form a unique iris code (Abstract). The image of the eye is acquired in digital form suitable for analysis (col. 4, lines 55-56). An iris identification code of 2048 bits is obtained (col. 17, lines 52-62). The hamming distances encountered among different pictures of the same iris is .084 (col. 17, lines 40-46), i.e. the iris code provides substantially repeatable representation of the iris for stored reference codes and presented codes].

As to claim 15, Schwab further discloses, wherein determining the match comprises identifying and comparing the at least one characteristic of the presented image metric with a corresponding characteristic of at least one of the predetermined

arrangement of the plurality of reference metrics (col. 9, lines 47-50, col. 10, lines 15-18, col. 10, lines 27-30).

11.   Claim 9, is rejected under 35 U.S.C. 103(a) as being unpatentable over Schwab (U.S. Patent 5,973,731) in view of Daugman (U.S. Patent 5,291560) as applied to claim 1 above, and further in view of Mann et al. (U.S. Patent 6,119,096).

As to claim 9, Schwab further discloses providing a local image database, as for example, of regular customers at a particular retail store or bank that deemed to be useful for local identification (col. 2, lines 52-59, col. 4, lines 39-47, col. 7, lines 3-8) (i.e., arranging the predetermined arrangement of the plurality of reference metrics based on an ordered search of the database). Neither Schwab nor Daugman specifically discloses, the predetermined arrangement is a selected subset of the plurality of reference metrics.

Mann discloses a system for automatic iris detection for identification of a passenger; the system may rely on any stable physical characteristic or a combination of such characteristics for identification (col. 5, lines 57-65). The system compares the images collected by biometric scanners at the exit point with subset of the overall database of stored images representing persons who entered the transit system but have not exited (ordered search using a selected subset of the plurality of reference metrics) (col. 9, lines 13-22). It would have been obvious to one with ordinary skill in the art at the time the invention was made to use Mann's teachings to modify the combined system of Schwab and Daugman by using a local database of selected subset of the

plurality of reference metrics based on an ordered search of the database in order to increase system search and response speed.

12.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samir A. Ahmed whose telephone number is 703-305-9870. The examiner can normally be reached on Mon-Fri 8:30am-6:00pm.
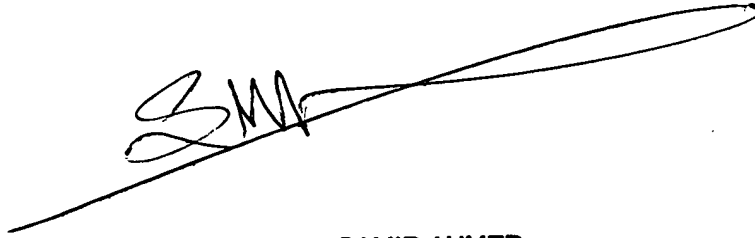
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-303-3900.

SA

SAMIR AHMED
PRIMARY EXAMINER